

Product datasheet for **RC223021**

CES2 (NM_198061) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CES2 (NM_198061) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CES2
Synonyms:	CE-2; CES2A1; iCE; PCE-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC223021 representing NM_198061
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTGCTCAGTCCCGCTCCTACCACACCCACCTTCCCGGCCAAGCCAGCGCACCCCGCTGACTC
 CCTGCCAGTCCAACTCCAAGGCTGGCAAGGCACTGATCCACTGCTGGACAGACCCGGGGCAGCCTCT
 GGGTGAACAGCAGCGTGTCCGCCGCGAGCAACCGAGACCAGCGAGCCGACCATGCGGCTGCACAGACTT
 CGTGCGCGGCTGAGCGCGGTGGCCTGTGGGCTTCTGCTGCTTCTGTCCGGGGCCAGGGCCAGGACTCAG
 CCAGTCCCATCCGGACCACACACGGGGCAGGTGCTGGGGAGTCTTGTCCATGTGAAGGGCCCAATGC
 CGGGTCCAAACCTTCTGGGAATTCATTTGCCAAGCCACCTCTAGGTCGCTGCGATTTGACCCCTT
 GAGCCCTGAATCTGGAGTGGTGTGAGGGATGGAACCCCATCCGGCCATGTGTCTACAGGACCTCA
 CCGCAGTGGAGTCAGAGTTTCTAGCCAGTTCAACATGACCTCCCTCCGACTCCATGTCTGAGGACTG
 CCTGTACCTCAGCATCTACACGCGGCCATAGCCATGAAGGCTCTAACCTGCCGGTGTGGTGTGGATC
 CACGGTGGTGCCTGTTTTGGCATGGCTTCTTGTATGATGGTTCCATGCTGGCTGCCTTGGAGAACG
 TGGTGGTGGTCATCATCCAGTACCGCTGGGTGTCTGGGCTTCTCAGCACTGGAGACAAGCACGCAAC
 CGGCAACTGGGGCTACCTGGACCAAGTGGCTGCACTACGCTGGGTCCAGCAGAATATCGCCACTTTGGA
 GGCAACCTGACCGTGTACCATTTTTGGCGAGTCTGCGGGTGGCAGAGTGTGTCTTCCGTTGTTGTGT
 CCCCCATATCCAAGGACTCTCCACGGAGCCATCATGGAGAGTGGCGTGGCCCTCTGCCCGCCCTCAT
 TGCCAGCTCAGCTGATGTATCTCCACGGTGGTGGCAACCTGTCTGCCTGTGACCAAGTTGACTCTGAG
 GCCCTGGTGGGCTGCCTGCGGGCAAGAGTAAAGAGGAGATTCTGCAATTAACAAGCCTTTCAAGATGA
 TCCCGGAGTGGTGGATGGGCTTCTGCCCAGGCACCCAGGAGCTGCTGGCCTCTGCCGACTTTCA
 GCCTGTCCCTAGCATTGTTGGTGTCAACAACAATGAATTCGGCTGGCTCATCCCCAAGGTATGAGGATC
 TATGATACCCAGAAAGAAATGGACAGAGAGGCCTCCAGGCTGCTCTGCAGAAAATGTTAACGCTGCTGA
 TGTTCCTCTACATTTGGTACCTGCTGAGGGAGGAGTACATTGGGACAATGGGGATCCCCAGACCTT
 CCAAGCGCAGTCCAGGAGATGATGGCGGACTCCATGTTTGTGATCCCTGCACTCCAAGTAGCACATTTT
 CAGTGTCCCGGGCCCTGTGTACTTCTACGAGTTCAGCATCAGCCAGCTGGCTCAAGAACATCAGGC
 CACCGCATGAAGGCAGACCATGTTAAATTCAGTGAAGAGGAGCAGCTAAGCAGGAAGATGATGAA
 GTACTGGCCAACTTTGCGAGAAATGGGAACCCCAATGGCGAGGGTCTGCCACACTGGCCGCTGTTGAC
 CAGGAGGAGCAATACCTGCAGCTGAACCTACAGCTGCGGTGGCCGGGCTCTGAAGGCCACAGGCTCC
 AGTTCTGAAGAAGGCGCTGCCCAAAAGATCCAGGAGCTCGAGGAGCCTGAAGAGAGACACAGAGCT
 G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

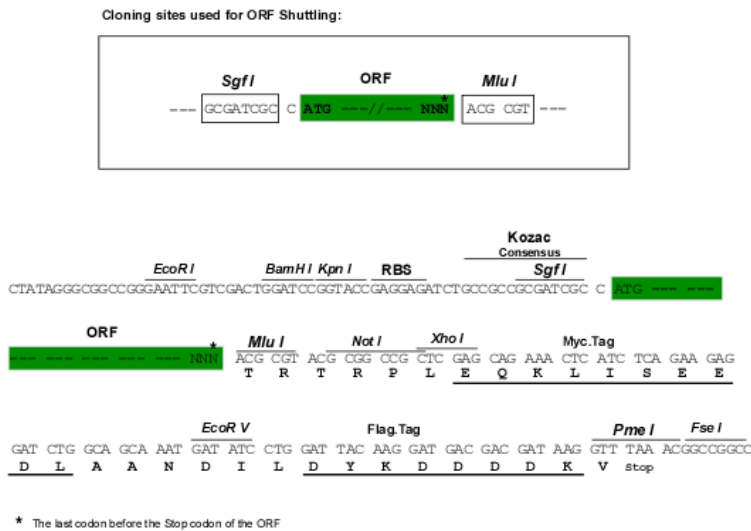
Protein Sequence:

>RC223021 representing NM_198061
 Red=Cloning site Green=Tags(s)

MTAQRSPTTPTFPGPSQRTPLTPCPVQTPRLGKALIHCVTPDGPQPLGEQQRVRRQRTETSEPTMRLHRL
 RARLSAVACGLLLLLVRGQGDASPIRTHHTGQVLGSLVHVKGANAGVQTFLGIPFAKPLGPLRFAPP
 EPPESWSGVRDGTTHPAMCLQDLTAVESEFLSQFNMTFSDSMSDECLYLSIYTPAHSHEGSNLPVMVWI
 HGGALVFGMASLYDGSMLAALENVVVVI IQYRLGVLGFFSTGDKHATGNWGYLDQVAALRWVQONIAHFG
 GNPDRVTIFGESAGGTSVSSLVSPISQGLFHGAIMESGVALLPGLIASSADVISTVVANLSACDQVDSE
 ALVGLRGSKEEILAINKPFKMIIPGVVDGVFLPRHPQELLASADFQPVPSIVGVNNEFWLIPKVMRI
 YDTQKEMDREASQAALQKMLTLLMLPPTFGDLLREEYIGDNGDPQTLQAQFQEMMADSMFVIPALQVAHF
 QCSRAPVYFYEFQHQPSWLKNIRPPHMKADHVKFTEEEQLSRKMMKYWANFARNGNPNGEGLPHWPLFD
 QEEQYLQNLQPAVGRALKAHRLQFVKKALPQKIQELEEPEERHTEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6708_d01.zip
Restriction Sites: SgfI-MluI
Cloning Scheme:



ACCN: NM_198061

ORF Size: 1821 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_198061.2, NP_932327.1](#)

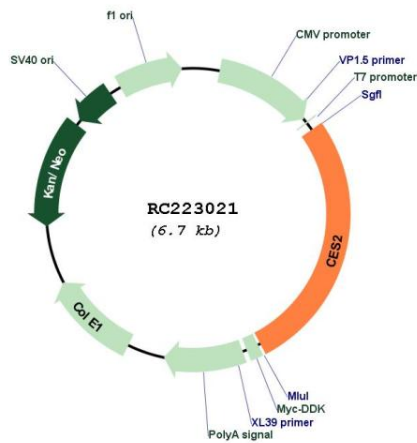
RefSeq Size: 3909 bp

RefSeq ORF: 1632 bp

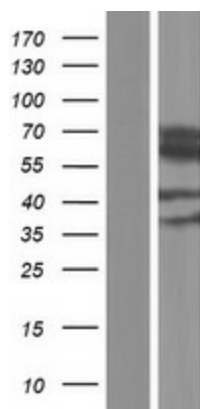
Locus ID: 8824
UniProt ID: [O00748](#)
Cytogenetics: 16q22.1
Protein Families: Druggable Genome
Protein Pathways: Drug metabolism - other enzymes
MW: 66.9 kDa

Gene Summary: This gene encodes a member of the carboxylesterase large family. The family members are responsible for the hydrolysis or transesterification of various xenobiotics, such as cocaine and heroin, and endogenous substrates with ester, thioester, or amide bonds. They may participate in fatty acyl and cholesterol ester metabolism, and may play a role in the blood-brain barrier system. The protein encoded by this gene is the major intestinal enzyme and functions in intestine drug clearance. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2010]

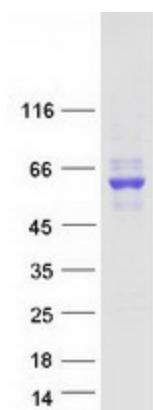
Product images:



Circular map for RC223021



Western blot validation of overexpression lysate (Cat# [LY405086]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223021 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CES2 protein (Cat# [TP323021]). The protein was produced from HEK293T cells transfected with CES2 cDNA clone (Cat# RC223021) using MegaTran 2.0 (Cat# [TT210002]).